

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:

Kiyoko Ueda et al.

Application No.: 10/575,662

Confirmation No.: 2199

Filed: April 14, 2006

Art Unit: 1795

For: PROCESS FOR PRODUCING RESIN-  
COATED METAL PARTICLES, RESIN-  
COATED METAL PARTICLES, AND  
TONER FOR FORMING CIRCUIT

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Examiner: R. L. Burney

**REPLY BRIEF**

This short Reply Brief is being submitted to point out a fundamental flaw in the Response to Argument section of the Examiner's Answer.

On page 7 of the Examiner's Answer, it is stated that "Mulvaney teaches a silica-coated metal which is reacted with a silane-containing ligand and then coupled with an organic conducting polymer coating." This statement is correct only insofar as it acknowledges that neither the ligand nor the polymer coating can be considered the coating on the metal as claimed. It is wrong in contending that Mulvaney teaches a "silica-coated metal" core.

The error in the assertion is apparently the result of ignoring Mulvaney's explanation of the product's construction at column 5, lines 25-32. There, Mulvaney states

"The particle is coated with a coating layer....The coating is bonded to the particle through a bifunctional ligand."

This teaching is confirmed, *inter alia*, by Figure 1. While the coating may be silica, it is "bonded to the particle through" through the ligand, as shown in the lower half of Figure 1. Thus, Mulvaney's construction is

core ----ligand --- silica coating

while the claims on appeal require

metal particle core – silica – ligand – coating.

On page 6, it is asserted that the "particle is coated with a coating layer which may be a preferred silica coating layer (column 6, lines 39-53, especially lines 52-53)." This observation fails to recognize that the preferred silica "coating is bonded to the particle through a bifunctional ligand", as shown in the bottom of Figure 1. The ligand ( $-\text{S}(\text{CH}_2)_3\text{Si}(\text{O})_3-$  in the figure) separates the preferred silica coating from the core whereas the claims locate silica between the core and the ligand.

The Examiner's Answer paragraph continues by saying that the first functional group of the bifunctional ligand is selected so as to bind to "a particle which has been coated (column 5, lines 49-53)." What Mulvaney actually says is the ligand group is selected so as to bind to "a particle which has been coated according to the method disclosed herein" (emphasis added). The "method disclosed herein" is where the "coating is bonded to the particle through a bifunctional ligand." (column 5, lines 31-32). In other

words, the particle and coating particle sandwich the ligand (particle-ligand-coating), whereas in the invention, the particle and the ligand sandwich the silica while the silica and coating sandwich the ligand (particle-silica-ligand-coating).

For the reasons set forth herein and in the Appeal Brief, Mulvaney does not teach or suggest the claimed invention whether considered alone or in combination with the other references. The Examiner's rejections should be reversed.

Dated: September 3, 2009

Respectfully submitted,

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